

VOM MEERESBODEN ZUR ATMOSPÄRE

Datenmanagement der Kieler Meereswissenschaften

- von der Messung bis zur Publikation -

Hela Mehrrens – GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel



Von der Messung bis zur Publikation

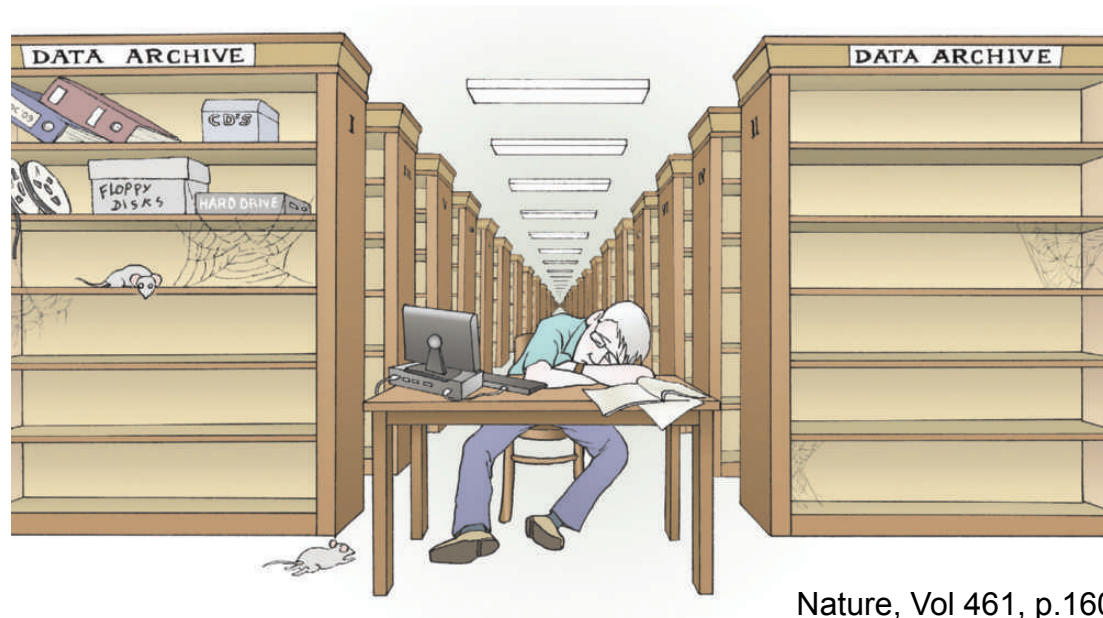
Inhalt

Entstehung

Unser Ziel

Systeme

Ausblick



Nature, Vol 461, p.160

Von der Messung bis zur Publikation

Entstehung

- Seit 2009 Datenmanagement Team am GEOMAR (KDMT)
- Future Ocean, SFB574, SFB754 und GEOMAR
- ECO2, MaNIDA, BIOACID II
- Datenmanagement Infrastruktur (KDMI)
- 2 Standorte
- Hintergrund

Von der Messung bis zur Publikation

Unser Ziel

ist EINE Anlaufstelle für alle Bereiche der Meereswissenschaften für die

- Datenbeschreibung
- Datenspeicherung
- Datenpublikation

unabhängig vom Projektstatus, jedoch mit konfigurierbaren Zugangsregeln je nach Projekt.

Verfahren der Vorbereitung von Daten zur Publikation

Von der Messung bis zur Publikation

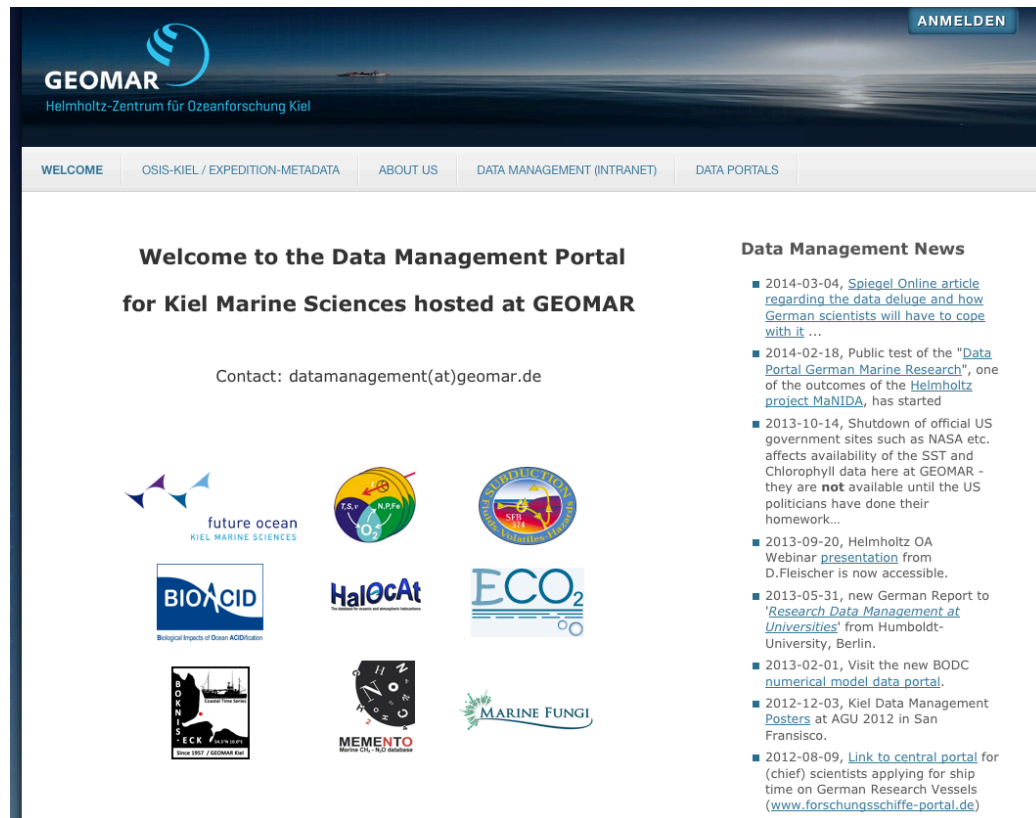
Systeme

- Portal
- OSIS
- DSHIP
- OceanRep
- PANGAEA
- SVN
- Multimedia Datenbank
- Kern-und Probenlager
- OCN und Smartpen

Von der Messung bis zur Publikation

Das Portal

portal.geomar.de



The screenshot shows the GEOMAR Data Management Portal. At the top, the GEOMAR logo and name are displayed, along with the text 'Helmholtz-Zentrum für Ozeanforschung Kiel'. A navigation bar includes links for WELCOME, OSIS-KIEL / EXPEDITION-METADATA, ABOUT US, DATA MANAGEMENT (INTRANET), and DATA PORTALS. The main content area features a welcome message, contact information (datamanagement(at)geomar.de), and a grid of logos for various research projects: future ocean, BIOACID, HaLOCat, ECO₂, ECK, MEMENTO, and MARINE FUNGI. On the right, a 'Data Management News' section lists several updates, including articles from Spiegel Online, public tests of the 'Data Portal German Marine Research', and reports on government site shutdowns and new German reports on research data management.

GEOMAR
Helmholtz-Zentrum für Ozeanforschung Kiel

ANMELDEN

WELCOME | OSIS-KIEL / EXPEDITION-METADATA | ABOUT US | DATA MANAGEMENT (INTRANET) | DATA PORTALS

**Welcome to the Data Management Portal
for Kiel Marine Sciences hosted at GEOMAR**

Contact: datamanagement(at)geomar.de

Data Management News

- 2014-03-04, [Spiegel Online article regarding the data deluge and how German scientists will have to cope with it ...](#)
- 2014-02-18, Public test of the "[Data Portal German Marine Research](#)", one of the outcomes of the [Helmholtz project MaNIDA](#), has started
- 2013-10-14, Shutdown of official US government sites such as NASA etc. affects availability of the SST and Chlorophyll data here at GEOMAR - they are **not** available until the US politicians have done their homework...
- 2013-09-20, Helmholtz OA Webinar [presentation](#) from D.Fleischer is now accessible.
- 2013-05-31, new German Report to "[Research Data Management at Universities](#)" from Humboldt-University, Berlin.
- 2013-02-01, Visit the new BODC [numerical model data portal](#).
- 2012-12-03, Kiel Data Management [Posters](#) at AGU 2012 in San Francisco.
- 2012-08-09, [Link to central portal](#) for (chief) scientists applying for ship time on German Research Vessels ([www.forschungsschiffe-portal.de](#))

Von der Messung bis zur Publikation

Das Portal

- Liferay EE 6.1.20
- Interne Webseiten: Dokumentenaustausch, Blog, Wiki, Kalender, Datenbankanwendungen
- Öffentliche Webseiten: Webinhalt, Bildergalerie, Publikationslisten
- Persönliches Login, Zuordnung zu Organisationen und Projekten (Sites)
- Momentan gibt es 56 Sites, 1800 Benutzer (davon ca. 800 aktiv)

Das Portal: Beispiel SFB754



SFB754

SFB 754

HOME DATA PUBLICATIONS DOCUMENTS WEBSITE OMZ-WIKI THIRD PHASE WIKI

SFB 754 Publications

Peer-Reviewed Articles

2014

Löschner, C., Großkopf, T., Desai, F., Gill, D., Schunck, H., Croot, P., Schlosser, C., Neulinger, S., Pinnow, N., Lavik, G., Kuypers, M. M. M., LaRoche, J. and Schmitz-Streit, R. (2014) *Facets of diazotrophy in the oxygen minimum zone waters off Peru* The ISME Journal . DOI [10.1038/ismej.2014.71](https://doi.org/10.1038/ismej.2014.71).
Related to: M77/3, M77/4

Scholz, F., Severmann, S., McManus, J. and Hensen, C. (2014) *Beyond the Black Sea paradigm: The sedimentary fingerprint of an open-marine iron shuttle* Geochimica et Cosmochimica Acta, 127 . pp. 368-380. DOI [10.1016/j.gca.2013.11.041](https://doi.org/10.1016/j.gca.2013.11.041).
Related to: M77/1, M77/2

Stramma, L., Weller, R. A., Czeschel, R. and Borge, S. (2014) *Eddies and an extreme water mass anomaly observed in the eastern south Pacific at the Stratus mooring* Journal of Geophysical Research - Oceans, 119 (2). pp. 1068-1083. DOI [10.1002/2013JC009470](https://doi.org/10.1002/2013JC009470).

Brandt, P., Funk, A., Tantet, A., Johns, W. E. and Fischer, J. (2014) *The Equatorial Undercurrent in the central Atlantic and its relation to tropical Atlantic variability* Climate Dynamics . DOI [10.1007/s00382-014-2061-4](https://doi.org/10.1007/s00382-014-2061-4).
Related to: M47/1, M68/2, M80/1, MSM18/2, ATA_IFMGEOMAR/4

Hahn, J., Brandt, P., Greatbatch, R. J., Krahmann, G. and Körtzinger, A. (2014) *Oxygen variance and meridional oxygen supply in the Tropical North East Atlantic oxygen minimum zone* Climate Dynamics . DOI [10.1007/s00382-014-2065-0](https://doi.org/10.1007/s00382-014-2065-0).
Related to: M47/1, M68/2, M80/1, MSM18/2, ATA_IFMGEOMAR/4

Zinke, J., Pfeiffer, M., Park, W., Schneider, B., Reuning, L., Dullo, W. C., Camoin, G. F., Mangini, A., Schroeder-Ritzrau, A., Garbe-Schönberg, D. and Davies, G. R. (2014) *Seychelles coral record of changes in sea surface temperature bimodality in the western Indian Ocean from the Mid-Holocene to the present* Climate Dynamics . DOI [10.1007/s00382-014-2082-z](https://doi.org/10.1007/s00382-014-2082-z).

Flögel, S., Dullo, W. C., Pfannkuche, O., Kiriakoulakis, K. and Rüggeberg, A. (2014) *Geochemical and physical constraints for the occurrence of living cold-water corals* Deep-Sea Research Part II-Topical Studies in Oceanography, 99 . pp. 16-26. DOI [10.1016/j.dsr2.2013.06.006](https://doi.org/10.1016/j.dsr2.2013.06.006).

2013

Kriest, I. and Oeschies, A. (2013) *Swept under the carpet: organic matter burial decreases global ocean biogeochemical model sensitivity to remineralization length scale* Biogeosciences (BG), 10 . pp. 8401-8422. DOI [10.5194/bg-10-8401-2013](https://doi.org/10.5194/bg-10-8401-2013).

EPrints include

Book chapters

Jump to: [2014](#) | [2012](#) | [2011](#) | [2010](#)
Number of items: 9.

2014

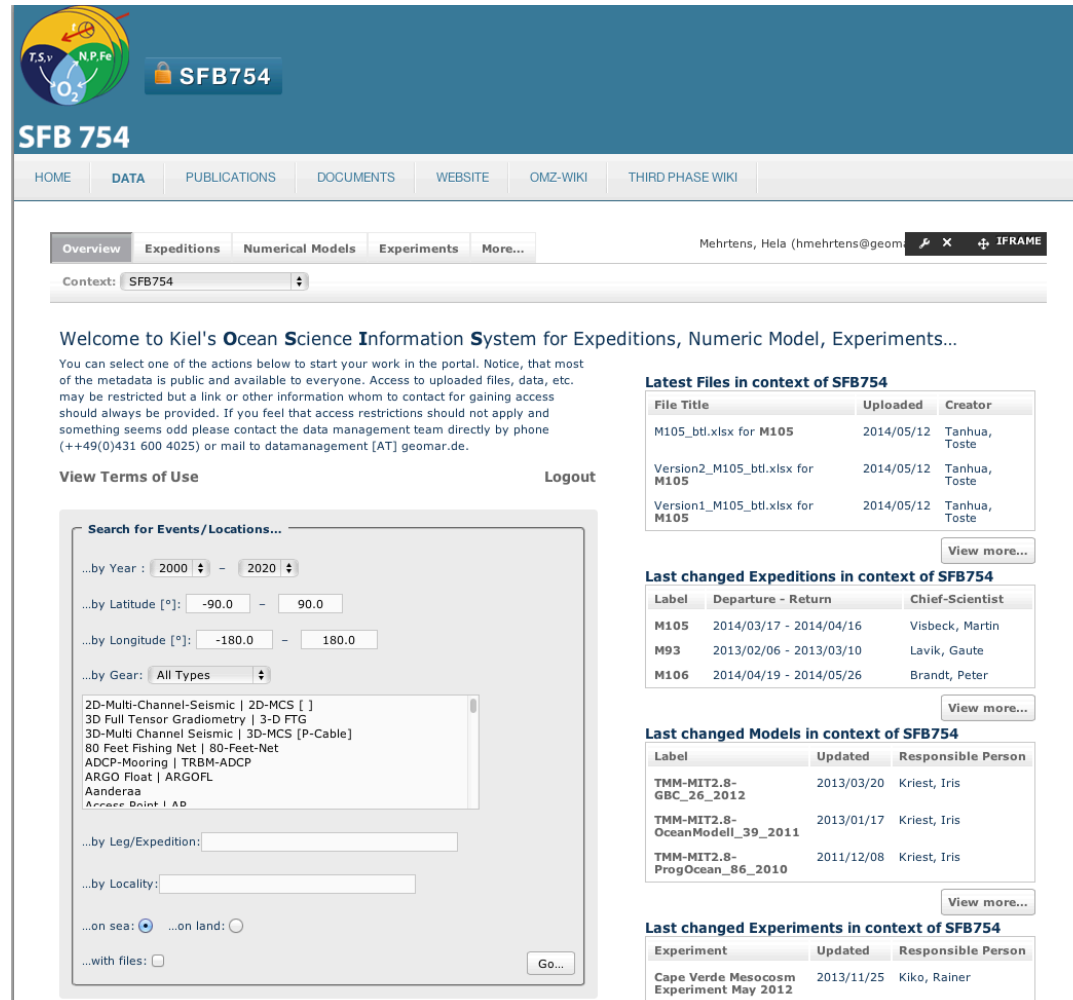
Bakker, D. C. E., Bange, H. W., Gruber, N., Johannessen, T., Upstill-Goddard, R. C., Borges, A. V., Delille, B., Löschner, C., Naqvi, S. W. A., Omar, A. M. and Santana-Casiano, J. M. (2014) *Air-sea interactions of natural long-lived greenhouse gases (CO₂, N₂O, CH₄) in a changing climate* In: Ocean-Atmosphere Interactions of Gases and Particles, , ed. by Liss, P. and Johnson, M. T. Springer Earth System Sciences . Springer, Berlin, Germany, pp. 113-169. ISBN 978-3-642-25642-4 DOI [10.1007/978-3-642-25643-1_3](https://doi.org/10.1007/978-3-642-25643-1_3).

Dengg, J., Soria-Dengg, S. and Tiemann, S. (2014) *Marine geosciences from a different perspective: production of "edutainment" video-clips by pupils and researchers* In: Geoscience Research and Outreach, , ed. by Tong, V. Innovations in Science Education and Technology, 21 . Springer, London, UK, pp. 103-119. ISBN 978-94-007-6942-7 DOI [10.1007/978-94-007-6943-4_8](https://doi.org/10.1007/978-94-007-6943-4_8).

Soria-Dengg, S. and Dengg, J. (2014) *Communicating Science to High School Pupils by Video Production: Lessons Learned* In: Proceedings International Workshop Science education and guidance in schools: the way forward - 21-22 October 2013 Auditorium Sant'Apollonia, Florence, Italy, , ed. by Raschi, A., Di Fabio, A. and Sebastiani, L. Edizioni ETS, Florenz, Italy, pp. 283-289. ISBN 978-88-903469-2-7

OSIS

- Ocean Science Information System
- Expeditionen, Modelle, Experimente
- Metadaten öffentlich
- Datenfiles nur im Projekt zugänglich oder frei verfügbar
- Etwa 3700 Files verfügbar
- Expeditionen und Projekte auf der Homepage



SFB 754

HOME DATA PUBLICATIONS DOCUMENTS WEBSITE OMZ-WIKI THIRD PHASE WIKI

Overview Expeditions Numerical Models Experiments More...

Context: SFB754

Welcome to Kiel's **Ocean Science Information System** for Expeditions, Numeric Model, Experiments...

You can select one of the actions below to start your work in the portal. Notice, that most of the metadata is public and available to everyone. Access to uploaded files, data, etc. may be restricted but a link or other information whom to contact for gaining access should always be provided. If you feel that access restrictions should not apply and something seems odd please contact the data management team directly by phone (+49(0)431 600 4025) or mail to datamanagement@geomar.de.

View Terms of Use **Logout**

Search for Events/Locations...

...by Year: 2000 - 2020

...by Latitude [°]: -90.0 - 90.0

...by Longitude [°]: -180.0 - 180.0

...by Gear: All Types

2D-Multi-Channel-Seismic | 2D-MCS []
 3D Full Tensor Gradiometry | 3-D FTG
 3D-Multi Channel Seismic | 3D-MCS [P-Cable]
 80 Feet Fishing Net | 80-Feet-Net
 ADCP-Mooring | TRBM-ADCP
 ARGO Float | ARGOFL
 Aanderaa
 Access Point | AP

...by Leg/Expedition:

...by Locality:

...on sea: ☒ ...on land: ☐

...with files: ☐

Go...

Latest Files in context of SFB754

File Title	Uploaded	Creator
M105_btl.xlsx for M105	2014/05/12	Tanhua, Toste
Version2_M105_btl.xlsx for M105	2014/05/12	Tanhua, Toste
Version1_M105_btl.xlsx for M105	2014/05/12	Tanhua, Toste

View more...

Last changed Expeditions in context of SFB754

Label	Departure - Return	Chief-Scientist
M105	2014/03/17 - 2014/04/16	Visbeck, Martin
M93	2013/02/06 - 2013/03/10	Lavik, Gaute
M106	2014/04/19 - 2014/05/26	Brandt, Peter

View more...

Last changed Models in context of SFB754

Label	Updated	Responsible Person
TMM-MIT2.8-GBC_26_2012	2013/03/20	Kriest, Iris
TMM-MIT2.8-OceanModell_39_2011	2013/01/17	Kriest, Iris
TMM-MIT2.8-PropOcean_86_2010	2011/12/08	Kriest, Iris

View more...

Last changed Experiments in context of SFB754

Experiment	Updated	Responsible Person
Cape Verde Mesocosm Experiment May 2012	2013/11/25	Kiko, Rainer

Von der Messung bis zur Publikation

DSHIP

- Einsatz
- Positionslisten, Stationen, Geräteeinsätze, Messdaten
- Archiv Import
- Stationslisten in OSIS



The screenshot shows the DSHIP Landsystem web interface. On the left is a navigation menu with links: Home, FS Alkor, FS Sonne, FS Merian, FS Meteor_Neu, and FS Poseidon. The main content area has a header image of a research vessel and the title 'DSHIP Landsystem'. Below the title is a paragraph explaining the system's purpose: 'Mit dem Messdatenmanagementsystem DAVIS-SHIP werden auf unterschiedlichen Forschungsschiffen systematisch nautische und wissenschaftliche Daten erfasst, aufbereitet und archiviert.' This is followed by a paragraph about data archiving: 'Die Archivdateien der Forschungsschiffe werden in das DSHIP-Landsystem überführt und stehen über dieses Web-Interface zur Verfügung. Für jedes Forschungsschiff, existieren im Navigationsbereich entsprechende Links, die zur Oberfläche der Datenextraktion, zur Ablage der extrahierten Daten und zu mit der Datenextraktion relevanten Dokumentation führen.' There are three sections: 'Extraktion' (describes starting the extraction process), 'Extrahierte Daten' (describes the file structure and local storage), and 'Data Inventory' (describes the data inventory). A 'Dokumentation' section is also present, describing the installation and access to data banks. At the bottom, there are logos for GEOMAR (Helmholtz Centre for Ocean Research Kiel), DAVIS SHIP, and werum.

Von der Messung bis zur Publikation

OceanRep

- Seit 2010 Institutsrepository
- Basiert auf Eprints (Southampton)
- Nutzerverwaltung und Organisationsstruktur
- Publikationslisten für Projekte und Organisationen
- Verlinkung zu OSIS
- Verlinkung zu Datenpublikationen in PANGAEA mit Icon

Von der Messung bis zur Publikation

PANGAEA

- www.pangaea.de
- „Open Access library“
- Kooperation durch mehrere Projekte
- Daten der Projekte
- GEOMAR Daten



Von der Messung bis zur Publikation

SVN

- Subversion: Versionskontrolle für Programmcodeentwicklung
- Ca. 25 Repositorien
- Zugangskontrolle
- Trac Ticket System
- Trac Wiki

DM - EPrints at GEOMAR

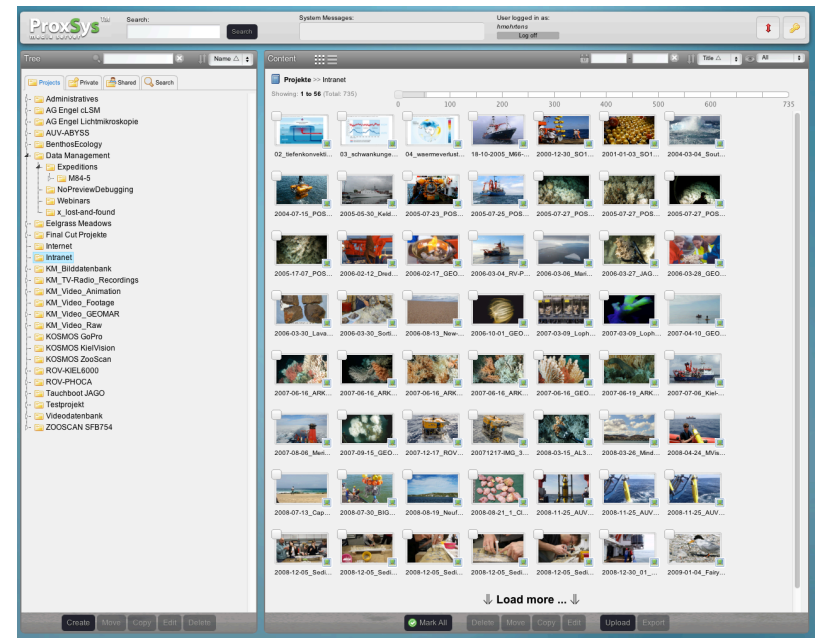
logged in as hmehtens@geomar.de | [Logout](#) | [Preferences](#) | [Help/Guide](#) | [About Trac](#)

	Wiki	Timeline	Roadmap	Browse Source	View Tickets	New Ticket	Search	Admin
				source: branches / 3.3_upgrade @ 510				
				Visit: <input type="text"/> View revision: <input type="text"/>				
Name	Size	Rev	Age	Author	Last Change			
..								
archives		367	19 months	hmehtens	missing phrases inserted and geomar divisions views with top Kiel ...			
bin		268	2 years	tmb	Fix perl path in bin scripts			
cfg		354	20 months	cschirnick	eprints: adjusting templates etc. for CAU to eliminate errors with ...			
cgi		341	21 months	cschirnick	Applied Changeset 7791 from branches/3.3/system to cgi/latest_tool to fix ...			
epservices		44	4 years	tmb	* Tidying up SVN tree TMB			
lib		363	19 months	hmehtens	send request with captcha			
perl_lib		366	19 months	hmehtens	bibtex import of institutions, pg error translated to German, views for ...			
testdata		247	2 years	tmb	3.3.8 upgrade			
tests		264	2 years	tmb	3.3.9 upgrade			
var		64	4 years	cschirnick	Removed indexer.tick from var directory in order to avoid subversion ...			
.bashrc	356 bytes	354	20 months	cschirnick	eprints: adjusting templates etc. for CAU to eliminate errors with ...			
.profile	189 bytes	190	3 years	cschirnick	For completeness added configuration in .profile and .bashrc in OceanRep? ...			
.vimrc	2.9 KB	273	2 years	tmb	Suppress warnings about unique_violations - no useful DBI::err so as ...			
AUTHORS	1.3 KB	247	2 years	tmb	3.3.8 upgrade			
CHANGELOG	313.8 KB	264	2 years	tmb	3.3.9 upgrade			
COPYING	17.6 KB	4	4 years	cschirnick	Initial EPrints code import from development platform into trunk on ...			
local.cshrc	136 bytes	4	4 years	cschirnick	Initial EPrints code import from development platform into trunk on ...			

Von der Messung bis zur Publikation

Multimedia Datenbank

- Bild- und Videodatenbank **ProxSys**
- Metadaten und Vorschaumöglichkeiten
- Großgeräte ROV und AUV
- Mikroskopie
- Öffentlichkeitsarbeit



Von der Messung bis zur Publikation

Kern- und Probenlager

- International Geo Sample Number (IGSN)
- Katalogisierung der Probenkisten
- Standards zur Probenlogistik
- QR-Codes oder RFID-Tags



Fotoclub 2013 Hans Helmut Freund

Von der Messung bis zur Publikation

Ausblick

- Data Policy
- Smartpen und OCN, PubFlow

Von der Messung bis zur Publikation

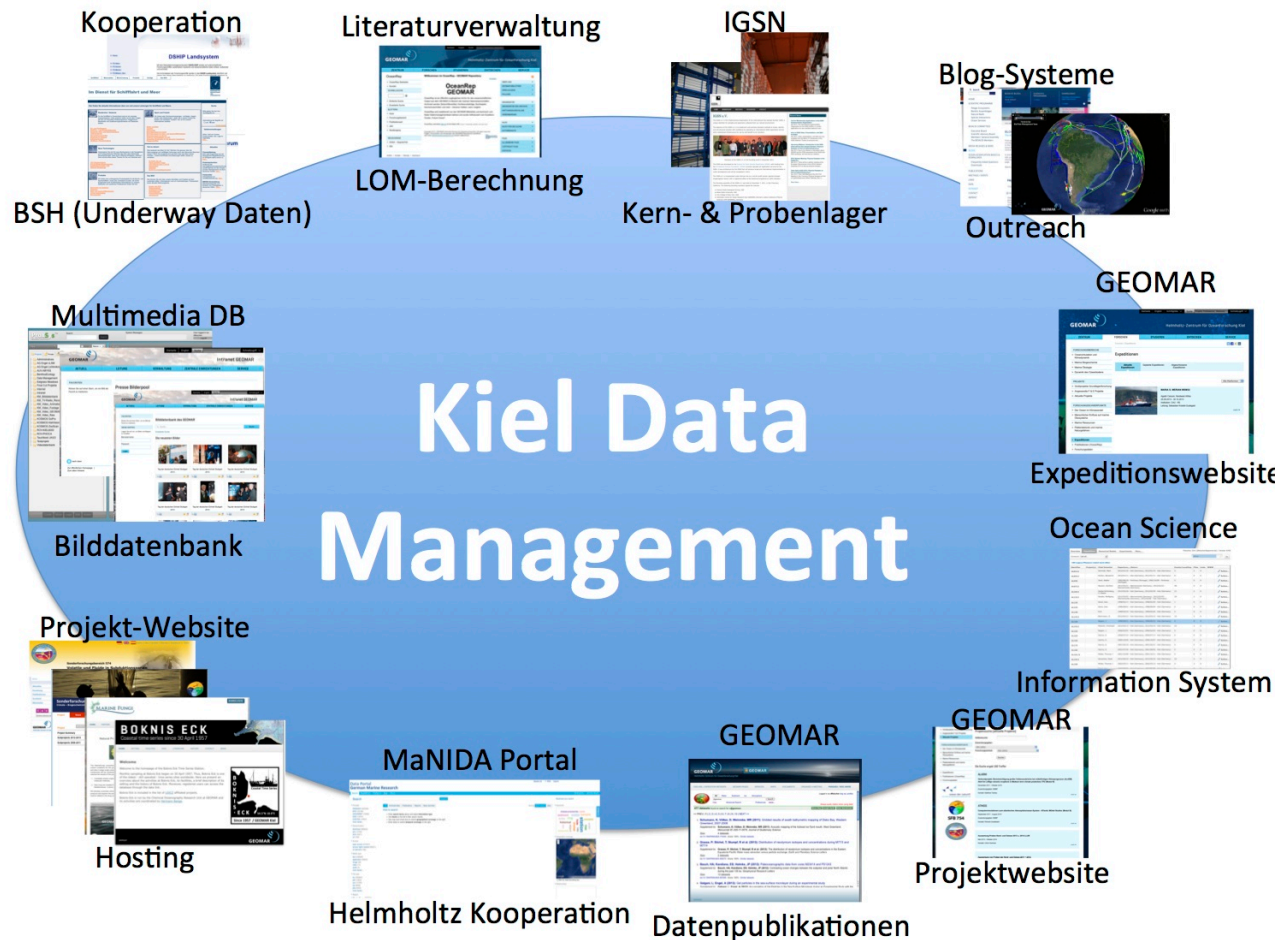
Data Policy

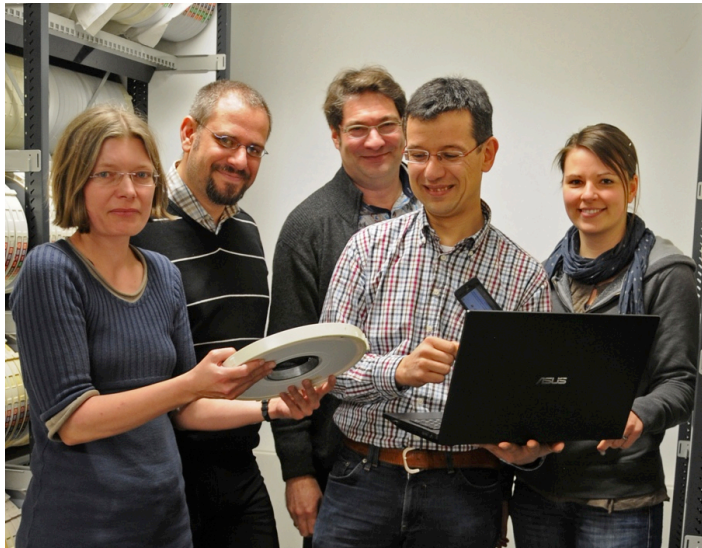
- Data Policy für Projekte
- Aufbewahrung der Daten 10 Jahre am Ort des Entstehens
- Zusammenarbeit mit VFU@Kiel und UB

Von der Messung bis zur Publikation

Smart Pen/OCN

- elektronische Aufnahme von Schrift
- Testbetrieb im Projekt CVOO
- Fehleranfälligkeit der Übertragung verringern
- direkte Übernahme in die Datenbank OCN
- PubFlow: Daten aus OCN bei PANGAEA





Vielen Dank

Hela Mehrtens, Dirk Fleischer, Carsten Schirnack, Andreas Czerniak, Pina Springer